U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA NUMBER: CO-100-2008-005 EA

CASEFILE/ALLOTMENT NUMBER: #0501279 / #04138

PROJECT NAME: Ten year grazing lease renewal for the Big Sugarloaf Allotment #04138, permitted to Sullivan Herefords (#0501279).

LEGAL DESCRIPTION: See allotment map (Attachment #1, 1a, 1b)

Big Sugarloaf Allotment #04138	T4N, R90W, Sec. 36 T4N, R89W, parts of Sec. 31 T3N, R90W, parts of Sec. 24, 25, 26
	121 BLM Acres 1270 Private Acres 1391 Total Acres

APPLICANT: Sullivan Herefords

PLAN CONFORMANCE REVIEW: The Proposed Action and Alternatives are subject to the following plan:

Name of Plan: Little Snake Resource Management Plan and Record of Decision

Date Approved: April 26, 1989

Other Documents:

Federal Land Policy and Management Act of 1976, as amended (FLPMA) (43 USC 1752)

Rangeland Reform Final Environmental Impact Statement. December, 1994.

Standards for Public Land Health and Guidelines for Livestock Grazing in Colorado. Date Approved: February 12, 1997.

Results: The Proposed Action is consistent with the Little Snake Resource Management Plan, Record of Decision, Livestock Grazing Management objective to improve range conditions for both wildlife and livestock through proper utilization of key forage plants and adjusting livestock stocking rates as a result of vegetation studies.

The Proposed Action is located in the Little Snake River Management Unit 1 (MU 1) and 4 (MU 4). The Proposed Action is compatible with the management objectives for these units. The objectives of MU 1 include the development of coal, oil, and gas. MU 4 objectives include the development of oil and gas as well as geothermal and forest resources. Livestock grazing is consistent with the management objectives for each unit.

The Proposed Action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3).

NEED FOR PROPOSED ACTION: The grazing lease held by Sullivan Herefords for the Big Sugarloaf Allotment #04138 (#0501279) expired in 2006 and was renewed in 2007 and again in 2008, under the same terms and conditions, in accordance with Section 325, Title III, H.R. 2691, Department of Interior and Related Agencies Appropriations act, 2004 (P.L. 108-108) pending completion of environmental analysis consistent with the National Environmental Policy Act (NEPA). The current lessee requested a change in the grazing use schedule to more accurately reflect present grazing use and operator management of adjacent private lands.

This grazing lease is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. The Bureau of Land Management has the authority to renew livestock grazing permits and leases consistent with the provisions of the *Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act,* and Little Snake Field Office's *Resource Management Plan/Environmental Impact Statement.* This RMP/EIS has been amended by *Standards for Public Land Health in the State of Colorado.*

The following Environmental Assessment will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the lease which improve or maintain public land health. The Proposed Action will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (lessee) must hold a grazing lease. The grazing lessee has a preference right to receive the lease if grazing is to continue. The land use plan allows grazing to continue. This EA will be a site specific look to determine if grazing should continue as provided for in the land use plan and to identify the conditions under which it can be renewed.

PUBLIC SCOPING PROCESS:

BLM Little Snake Field Office sent out a Notice of Public Scoping on October 13, 2004 to determine the level of public interest, concern, and resource conditions on the grazing allotments that were up for renewal in fiscal year 2006. A notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on lease renewals. A letter was sent to affected lessees in July of 1999 informing them of the upcoming renewal process and requesting any information they wanted included in or taken into consideration during the renewal process. The issuance of a grazing lease for the allotment has been carefully analyzed within the scope of the specific action being taken, resource issues or concerns, and public input received.

BACKGROUND:

Big Sugarloaf #04138

This allotment is located approximately five miles south of Pagoda, CO near Indian Run State Wildlife Area. Moffat County Road 67 takes off of Highway 317 providing access to the allotment. The allotment consists of two separate portions, both of which are largely private ownership with small BLM segments. The first portion is just south of the Indian Run access area and lies west of CR 67 and the South Fork of the Williams Fork River encompassing the Sullivan Reservoir. The allotment is characterized by rolling to steep terrain ranging in elevation from 7,000 feet up to 7,600 feet on the ridge tops. The primary water sources in the allotment are the Sullivan Reservoir and Cedar Creek both located on private land. The dominant range site within the allotment is a Brushy Loam.

The second portion lies about four miles further to the south just past the end of the county road and northeast of Big Sugarloaf Mountain. The BLM land within this allotment is very steep and there are few livestock water sources within the allotment boundary. The elevation ranges from 7,600 feet to just over 8,100 feet.

The allotment is currently classified as a category C (custodial) allotment which is defined by the Rangeland Program Summary for the Little Snake Resource Management Plan as an allotment that has low production potential for livestock forage, there are no major resource conflicts or controversy and present management is accomplishing the desired results.

The existing lease is for 11 cattle from 07/01 to 09/30. There are a total of 33 AUMs associated with the current lease.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

PROPOSED ACTION:

Renew grazing lease #0501279 for a period of ten years, expiring February 28, 2018. Total permitted use would be limited to 33 AUMs per grazing year as a term and condition of the lease. The lease would be renewed as follows:

FROM:

Allotment name and number	Livestock Number and kind	Dates Begin	End	%PL	AUMs
Big Sugarloaf #04138	11 Cattle	07/01	09/30	100	33

TO:

Allotment name and number	Livestock Number and kind	Dates Begin	End	%PL	AUMs
Big Sugarloaf	11 Cattle	06/10	07/10	100	11
#04138	11 Cattle	09/15	11/14	100	22

This lease would also be subject to the Standard and Common Terms and Conditions found in Attachment #2.

NO ACTION ALTERNATIVE:

No changes to the season of use would occur under this alternative. Livestock would continue to graze the allotment as permitted in the expiring lease.

ALTERNATIVES CONSIDERED BUT ELIMINATED:

No grazing Alternative: This alternative would eliminate livestock grazing on the allotment. This alternative is eliminated from analysis in this EA because it would not conform to the RMP/ROD. The RMP/ROD identified livestock grazing as a suitable and appropriate use on the allotment.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: The Big Sugarloaf Allotment does not lie within any special designation air sheds or non-attainment areas.

Environmental Consequences, all alternatives: Renewing the lease to graze cattle on the Big Sugarloaf Allotment would not cause regional air quality impairment under either of the alternatives. Some localized dust may result from driving on unpaved roads, but this would be negligible compared to dust generated from all vehicle uses in the vicinity.

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences, all alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Rob Schmitzer, 10/24/07

CULTURAL RESOURCES

Affected Environment: Grazing permit and lease renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment (10.4.08) was completed for the allotment on October 29, 2007 by Robyn Watkins Morris, Little Snake Field Office Archaeologist. The assessment followed the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding The Livestock Grazing And Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the Field Office archaeology files.

Data developed here were taken from the cultural program project report files, site report files, and base maps kept at the Little Snake Field Office as well as from GLO maps, BLM land patent records, An Overview of Prehistoric Cultural Resources Little Snake Resource Area, Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and An Isolated Empire, A History of Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and Appendix 21 of the Little Snake Resource Management Plan and Environmental Impact Statement, Draft February 1986, Bureau of Land Management, Craig, Colorado District, Little Snake Resource Area.

The table below is based on the allotment specific analysis developed for the allotment in this EA. The table shows known cultural resources, eligible and need data, and those that are anticipated to be in each allotment. Fieldwork for the cultural resources on the table will be carried out in current fiscal year or within the ten year lease renewal.

Acres Invento	Acres NOT	Percent-%-of	Number of	High Potential	Eligible or Need Data	Estimated Sites for	Management Recommendations

ried at a Class III level[2]	inventoried at a Class III Level	Allotment inventoried at a Class III level	Cultural Resources known in allotment	of Historic Properties	Sites – Known in Allotment (Site Numbers)	the Allotment ** (Total Number)	(Add'l inventory required and historic properties to be visited
0	1391	0	0	Yes-historic roads abound these allotment units	0		Survey areas where historic buildings are on maps.

(Note: *****Acres are derived from GIS allotment maps. 2. BLM and other acres in the allotment. See allotment specific analysis form. **Estimates of site densities are based on known inventory data. Estimates represent a minimum figure which may be revised upwards based on future inventory findings.)

No cultural resource inventories have been previously conducted within the allotment resulting in the complete coverage inventory of zero acres and the recording of zero cultural resources.

If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

Environmental Consequences, all alternatives: The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties.

Cultural Review Process

Monitoring of the previous year's range permit and lease renewal environmental documentation for FY98, FY99, FY2000, FY2001, FY2002, FY2003, FY2004, and FY2005 has been carried out. These reports represent three field seasons of evaluation work on the eligible and need data sites. The fieldwork conducted in 2000, 2001, 2002, 2003, and 2005, identified impacts to some of the cultural resources being evaluated. This information is covered in the following reports:

Keesling, Henry S. and Gary D. Collins, Patrick C. Walker
2000 Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EA's FY98 and FY99. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D., and Patrick C. Walker, Sam R. Johnson, Henry S. Keesling

2001 **Addendum to** Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EAs FY98 and FY99, **Range Permit Renewal EA's FY2000 and FY2001.** Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D. and Ryan J. Nordstrom, Henry S. Keesling
2002 **The Second Addendum** to The Cultural and Need Data Sites Within Range Allotments for Range Permit Renewal EA's FY98, FY99, FY00. FY01, and FY02. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D. and Henry S. Keesling
2003 **The Third Addendum** to The Cultural and Need Data Sites Within Range Allotments for Range Permit Renewals EA's FY98, FY99. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office

Collins, Gary D. and Henry S. Keesling
2005 T**he Fourth Addendum** Range Permit Renewal FY04 and FY05 to The Cultural Resource Evaluation of Known Eligible and need Data Sites Within Range Allotments for Range Permit Renewal EA's FY00, FY01, FY02, FY03. BLM 10.27.05. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy of file at that office.

BLM has committed to a ten year phased evaluation for cultural resources that takes into account identified livestock concentration areas and the cultural resources that are either eligible and/or need data and to carrying out mitigation on cultural resources that require this action. The phased monitor and mitigation approach will mitigate identified adverse effects, significant impacts and data loss (NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM/Colorado SHPO Protocol 1998; NEPA/FLPMA requirements) to an acceptable level.

The GIS mapping and evaluation effort will establish areas that have potential conflicts between livestock and prehistoric cultural resources. The GIS maps will provide a computer generated visual departure point for the proposed cultural fieldwork. GIS maps using USGS and BLM best available data, will be created showing springs, stream course features, riparian areas, and slopes that are greater than 30% slope within the allotment. Current understanding of prehistoric settlement and subsistence patterns will be applied to the GIS map review and used to establish prehistoric cultural areas. These potential livestock concentration areas will be evaluated in the field.

Livestock impacts may cause cumulative effects, some of which may be significant, and may cause long-term, irreversible, potentially irretrievable adverse impacts and data loss. However, the phased identification and evaluation fieldwork will identify mitigation measures that will reduce these impacts (NHPA Section 106; 36CFR800.9;

Archaeological Resource Protection Act 1979; BLM/Colorado SHPO Protocol 1998; NEPA/FLPMA requirements), to an acceptable level.

Other project specific Class III surveys initiated by the BLM, industry, or ranching will identify previously unrecorded cultural resources within this allotment. Newly identified cultural resources will need to be mitigated in relationship to the proposed project(s). Further, these cultural resources will be incorporated into current and future grazing review efforts to be evaluated and monitored as necessary.

Mitigative Measures: Standard stipulations for cultural resources are included in Standard Terms and Conditions (Attachment #2).

Allotment Specific Stipulations for this EA:

1. GIS maps based upon stream course features and springs from the 7.5 minute USGS maps and BLM best available riparian/spring data in this office will be used to initially establish evaluation areas for livestock concentrations. Current archaeological understanding of settlement and subsistence patterns for prehistoric cultural resources will be applied to these maps. Identified livestock concentration areas will be field evaluated. Those areas with no livestock impacts but with potential for cultural resources will under go the same Class III survey discussed below. This survey will be conducted documenting archaeological resources which may be impacted if grazing practices change in the future. Identified concentration areas that exhibit livestock impacts will have the following cultural surveys:

   Springs, riparian areas, streams or creeks, and intermittent drainage will have a Class III survey in the area of concentration that includes an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

   Springs will have a Class III survey in the area of concentration and include an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

2. GIS maps showing slope potential, 30% or greater, where rock art and rock shelters are predicted to occur, will be used to initially establish evaluation areas for Class III survey. These areas will be evaluated for livestock concentrations. Identified concentration areas will have the following cultural surveys performed:

   Potential rock shelters, rock art areas will be evaluated to see if cultural materials are present. When cultural resources are identified the site will be recorded and appropriate mitigation will be developed.

3. Previously identified sites, table above, and new sites recorded and evaluated as eligible and/or need data during other project specific Class III survey will need to be evaluated as well. Initial recording of new sites and re-evaluation of the known sites will establish current condition of the resource and help in developing a monitoring plan for all sites. Some sites will have to be monitored more often than others. Sites that are impacted by grazing activities will need further monitoring, physical protection or other mitigative measures developed.

4. Site monitoring plans, other mitigation plans, will be developed and provided to the Colorado State Historic Preservation Officer in accordance with the Protocol (1998) and subsequent programmatic agreements regarding grazing permit renewals.

The Colorado State Historic Preservation Officer (SHPO) agreed with the Bureau of Land Management, Colorado, (BLM) that the BLM could issue its Range Renewal Permits with the proposed Cultural Resource Management actions, monitoring known eligible and need data sites and conducting Class III and/or modified Class III surveys on selected areas of BLM lands within in a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

The Little Snake Field Office will initiate the monitoring of known eligible and need data sites the first field season following the issuing of the permit if possible. This survey will be based upon an accepted, BLM and SHPO, research design that will establish criteria for evaluation of the sites for livestock impacts and any needed mitigation and future monitoring needs.

Name of specialist and date: Robyn Watkins Morris, 10/29/07

ENVIRONMENTAL JUSTICE

Affected Environment: The Proposed Action is located in an area devoid of year-round populations.

Environmental Consequences, both alternatives: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts from the project. The project would not directly affect the social, cultural, or economic well being and health of Native American, minority or low-income populations.

Mitigative Measures: None

Name of specialist and date: Louise McMinn, 10/23/07

FLOOD PLAINS

Affected Environment: No large floodplain areas are present on the public lands within the Big Sugarloaf Allotment. The average gradient of Cedar Creek, as it crosses BLM lands is about 7%, which is too steep for floodplain development.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are known to occur in the vicinity of the Big Sugarloaf Allotment. Tarweed, purple mustard, yellow allysium and cheatgrass are annual invasive weeds that are common in this area. Perennial and biennial noxious weeds in this area include diffuse knapweed, hoary cress (whitetop), houndstongue, Canada thistle and other biennial thistles. Access to the public lands is restricted by private lands and the general public is not able to use these areas, reducing the threat of additional weed introductions.

Environmental Consequences, both alternatives: The adverse impact of increased invasive and/or noxious weed establishment is very similar under either of the alternatives. Vehicular access to public land for grazing operations, livestock and wildlife movement, as well as wind and water, can cause weeds to spread into new areas. Surface disturbance due to livestock concentration and human activities associated with grazing operations can also increase weed presence. Management practices, land uses by the livestock operator and their weed control efforts would largely determine the identification and potential occurrence of weeds within the allotment.

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

MIGRATORY BIRDS

Affected Environment: The Big Sugarloaf Allotment has one record of an active golden eagle nest from 1975. Golden eagles are on the USFWS 2002 Birds of Conservation Concern List. This nest site was not found during a field visit conducted in early fall of 2007.

Environmental Consequences, all alternatives: Livestock grazing would not have a negative impact on golden eagles within this grazing allotment. There is no chance of take to occur.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny, 10/29/07

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Eastern Shoshone on July 11, 2007. The letter listed the grazing allotments up for renewal in FY07 and included a map of the areas. A follow up phone call was performed on August 14, 2007. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris, 10/29/07

PRIME & UNIQUE FARMLANDS

Affected Environment: There are no Prime and Unique Farmlands present within the Big Sugarloaf Allotment.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species, or habitat for such species, present within this grazing allotment.

Environmental Consequences, all alternatives: Not applicable

Mitigative Measures: None

Name of specialist and date: Timothy Novotny, 10/29/07

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive species present on the Big Sugarloaf Allotment #04138.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim, 10/25/07

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous materials present on the Big Sugarloaf Allotment.

Environmental Consequences, all alternatives: Under both alternatives potential releases of hazardous materials could occur due to vehicular access for livestock management operations. Coolant, oil and fuel are materials that could potentially be released. This type of release is unlikely due to the limited amount of vehicular activity required on this allotment. If a release were to occur it would be extremely limited in nature, highly localized and would not result in an adverse impact to the allotment. Changing the season of use dates would not affect hazardous or solid waste.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 10/10/07

WATER QUALITY - GROUND

Affected Environment: The surface formations are the Mancos Shale, a Tertiary basalt and the Cretaceous Williams Fork Formation.

Environmental Consequences, all alternatives: Neither alternative would significantly impact ground water.

Mitigative Measures: None

Name of specialist and date: Jennifer Maiolo, 10/26/07

WATER QUALITY - SURFACE

Affected Environment: Runoff water drainage in the Big Sugarloaf Allotment flows to Cedar Creek and other unnamed tributaries of the South Fork Williams Fork River. The flow regime of Cedar Creek is not known, but it is likely intermittent. The South Fork Williams Fork River is a perennial tributary to the Williams Fork River. The South Fork Williams Fork River, and presumably its tributaries, need to have water quality that can support Aquatic Life Cold 1, Recreation 1b and Agriculture. None of the stream segments are listed as having impaired water quality and all of these stream segments are supporting their classified uses.

Environmental Consequences, all alternatives: Grazing use of the allotment would not impair water quality under either of the alternatives. Water quality would continue to support the present classified uses.

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian systems are present on public lands within the Big Sugarloaf Allotment. A short segment of Cedar Creek runs through a corner of public lands. This creek has cobbles and boulders which help dissipate high water flows and likely has scoured streambanks from high spring flows. The lower base flows of the stream during the remaining portion of the growing season would not support herbaceous riparian plants. Streambanks are lined with pines and other evergreen trees.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences, all alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Rob Schmitzer, 10/24/07

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present

Environmental Consequences, all alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Rob Schmitzer, 10/24/07

NON-CRITICAL ELEMENTS

SOILS

Affected Environment: The primary soil on public lands within the Big Sugarloaf Allotment where the majority of cattle grazing occurs is the Lintim loam, 3 to 12% slopes. This soil is deep and has a high water holding capacity and a high runoff rate. The other commonly occurring soils on the public lands have slopes in excess of 25%, a very low water holding capacity, shallow depths to bedrock and very high runoff. Soils in this area are derived from Mancos Shale and minor sandstones that are within the Mancos Shale geologic strata. The Lintim loam soil is correlated to the Mountain Loam Ecological Site. These soils are suited for livestock grazing.

Biological soil crusts do not typically develop into complex diverse crust communities within grazing allotments. Mosses are the most observable biological soil crust and these are found below the edge of the brush canopy, where trampling effects are lessened and sunlight is available. Cyanobacteria is present in the inter-spaces where forage and litter cover is not abundant and would likely be present on the less productive soils in the allotment.

Climatic factors such as drought, timing and type of rainfall, presence and depth of snowpack, freeze-thaw process and a frost-layer would affect the moisture regime of the soil profile seasonally. This provides varied levels and amounts of plant available water.

The soils in the Big Sugarloaf Allotment are well covered by big sagebrush and perennial grass with a diverse mixture of forbs. Soils exhibit slight movement and surface litter. A minor expression of rills and flow patterns are also present. These conditions, especially the presence of rills would be expected on the moderate slopes.

Environmental Consequences, all alternatives: Soil compaction and depleted soil cover are the most obvious impacts incurred as a result of livestock grazing. These affects would occur with either alternative. The majority of the affected lands within the allotment would have adequate plant and litter cover based on the prescribed utilization outlined in the Common Terms and Conditions (Attachment #2) of forage resources. Additionally, increased animal distribution may occur with reduced use during warmer periods.

No loss or gain of biological soil crusts would occur as a result of implementing either alternative.

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 11/14/07

UPLAND VEGETATION

Affected Environment: This allotment is dominated by sagebrush-mixed grass and mountain shrub communities. Dominant plants include Wyoming big sagebrush (*Artemisia tridentata* Nutt. spp. *wyomingensis*), rubber rabbitbrush (*Chrysothamnus nauseosus*), Gambel oak (*Quercus gambelii*), serviceberry (*Amelanchier alnifolia*), Sandberg bluegrass (*Poa secunda*), slender wheatgrass (*Elymus trachycaulus*), Indian ricegrass (*Oryzopsis hymenoides*), basin wildrye (*Elymus cinereus*), orchard grass (*Dactylis glomerata*), smooth brome (*Bromus inermis*) , squirreltail (*Sitanion hystrix*), Utah Juniper (*Juniperus osteosperma*), and pine trees (*Pinus*). Numerous other forbs are present on the allotment representing the diversity and vigor of the plant community.

Environmental Consequences, Proposed Action: Changing the season of use dates would move early summer use to the first part of June (6/10) through the middle of July with the start date coinciding closely with the end of the growing season. Additionally, the change of the fall grazing period to include October and part of November would overlap potential re-growth period for cool season grasses in the fall. Increased forage availability and palatability during these re-growth periods, along with cooler weather, would aid the distribution of the cattle during these use periods. Current conditions indicate that the stocking rate is appropriate. The proposed change in the season of use also removes livestock grazing during the dormant season. Combined with a proper stocking rate, this proposed use period would not adversely impact the forage resource.

Environmental Consequences, No Action Alternative: This alternative would not change the season of use period. Current operator use results in very little grazing during the mid summer months. This use period is during the hotter, dryer periods of the year resulting in less even distribution across the allotment on the steeper terrain and increased use near water sources. Plants would be able to take advantage of the full growing season and any late fall moisture but could also be used during the mid-summer months.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 10/18/07

WILDLIFE, AQUATIC

Affected Environment: A small section of Cedar Creek crosses public lands within this allotment. This creek is not capable of supporting aquatic wildlife throughout the year.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny, 10/29/07

WILDLIFE, TERRESTRIAL

Affected Environment: The Big Sugarloaf allotment is capable of supporting mule deer and elk throughout the year. This allotment provides severe winter range for elk. A variety of small mammals, songbirds and reptiles are found within this allotment at various times of the year.

Environmental Consequences, Proposed Action: The proposed changes in season of use would not have a negative impact on big game species using this allotment. There is an increased potential that ground nesting songbirds using this allotment could have nests destroyed by livestock. This is unlikely to occur frequently and would not have a negative impact on any species population.

Environmental Consequences, No Action Alternative: Most ground nesting birds would have hatched their eggs by the time livestock entered this allotment. Chance of take would be very low.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny, 10/29/07

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals	JAM 10/26/07		
Forest Management		CR 10/30/07	
Hydrology/Ground		JAM 10/26/2007	
Hydrology/Surface		OO 11/14/07	
Paleontology		JAM 10/26/07	
Range Management		CR 10/5/07	
Realty Authorizations		LM 10/23/07	
Recreation/Travel Mgmt		RS 10/24/07	
Socio-Economics		LM 10/23/07	
Solid Minerals	JAM 10/26/07		
Visual Resources		RS 10/24/07	
Wild Horse & Burro Mgmt	CR 11/16/07		

CUMULATIVE IMPACTS SUMMARY: This allotment and the surrounding areas have historically been grazed by cattle. The access to the public land in this allotment is limited by

location and terrain with local ranchers being the primary users in the area. Wildlife populations in the area are high, especially deer and elk, which compete with livestock for available forage throughout the area. The primary impacts from all these activities are seen in the presence of roads, cultivated private lands, and weed presence. The Proposed Action to continue grazing on this allotment is compatible with other uses, both historic and present, and would not add any new or detrimental impacts.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Proposed Action would not have a negative impact on big game, small mammals or reptiles. There is a small chance that some ground nesting songbirds could have nests destroyed by trampling. This is unlikely to occur frequently and there is little chance that species populations would be negatively impacted. The No Action Alternative would not have any impact on any wildlife species within this allotment. This standard is currently being met and either alternative would continue to meet this standard.

Name of specialist and date: Timothy Novotny, 10/29/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There are no threatened, endangered or special status animal species or habitat for such species within this allotment. This standard does not apply.

Name of specialist and date: Timothy Novotny, 10/29/07

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: This allotment is currently meeting this standard. The Proposed Action with split spring and fall use would result in livestock dispersing across the allotment and remove use during the warmer period in the summer. The current stocking rate for this allotment is appropriate and use would not be excessive. The Proposed Action would continue to meet this standard.

The No Action Alternative would also continue to meet this standard because of the current reduced use by the landowner during the summer months.

Name of specialist and date: Christina Rhyne, 10/18/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened, endangered or BLM sensitive plant species on the Big Sugarloaf Allotment #04138. This standard does not apply.

Name of specialist and date: Hunter Seim, 10/25/07

RIPARIAN SYSTEMS STANDARD: No riparian systems occur on the public lands in the Big Sugarloaf Allotment. This standard does not apply.

Name of specialist and date: Ole Olsen, 11/14/07

WATER QUALITY STANDARD: The water quality standard for healthy rangelands would be met with implementation of either the Proposed Action or No Action Alternatives. Runoff from snowmelt and summer storms drains from the Big Sugarloaf Allotment into stream segments that are presently supporting classified uses. No stream segments are listed as impaired.

Name of specialist and date: Ole Olsen, 11/14/07

UPLAND SOILS STANDARD: The upland soil standard for healthy rangelands would be met with the implementation of either the Proposed Action or No Action Alternatives. Upland soils have very slight erosion characteristics on moderate slopes following recent rains. The slight movement of soil particles and surface litter is appropriate for the moderate slopes. The native plant community provides good cover with a diverse mix of shrubs, grasses and forbs. Proper grazing use of the forage resource is required under the terms and conditions of the lease under each alternative. Proposed levels of grazing would maintain sufficient residual forage for upland soil health to be maintained.

Name of specialist and date: Ole Olsen, 11/14/07

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

MITIGATION MEASURES, BLM Commitments:

Cultural Resources:

Standard stipulations for cultural resources are included in Standard Terms and Conditions (Attachment #2).

Allotment Specific Stipulations for this EA:

1. GIS maps based upon stream course features and springs from the 7.5 minute USGS maps and BLM best available riparian/spring data in this office will be used to initially establish evaluation areas for livestock concentrations. Current archaeological understanding of settlement and subsistence patterns for prehistoric cultural resources will be applied to these maps. Identified livestock concentration areas will be field evaluated. Those areas with no livestock impacts but with potential for cultural resources will under go the same Class III survey discussed below. This survey will be conducted documenting archaeological resources which may be impacted if grazing practices change in the future. Identified concentration areas that exhibit livestock impacts will have the following cultural surveys:

Springs, riparian areas, streams or creeks, and intermittent drainage will have a Class III survey in the area of concentration that includes an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

Springs will have a Class III survey in the area of concentration and include an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

2. GIS maps showing slope potential, 30% or greater, where rock art and rock shelters are predicted to occur, will be used to initially establish evaluation areas for Class III survey. These areas will be evaluated for livestock concentrations. Identified concentration areas will have the following cultural surveys performed:

   Potential rock shelters, rock art areas will be evaluated to see if cultural materials are present. When cultural resources are identified the site will be recorded and appropriate mitigation will be developed.

3. Previously identified sites, table above, and new sites recorded and evaluated as eligible and/or need data during other project specific Class III survey will need to be evaluated as well. Initial recording of new sites and re-evaluation of the known sites will establish current condition of the resource and help in developing a monitoring plan for all sites. Some sites will have to be monitored more often than others. Sites that are impacted by grazing activities will need further monitoring, physical protection or other mitigative measures developed.

4. Site monitoring plans, other mitigation plans, will be developed and provided to the Colorado State Historic Preservation Officer in accordance with the Protocol (1998) and subsequent programmatic agreements regarding grazing permit renewals.

Conducting Class III survey(s), monitoring, and developing site specific mitigation measures will mitigate the adverse effects, data loss, and significant impacts (NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM Colorado and Colorado SHPO Protocol 1998; and NEPA/FLPMA requirements) to an acceptable level.

The Colorado State Historic Preservation Officer (SHPO) agreed with the Bureau of Land Management, Colorado, (BLM) that the BLM could issue its Range Renewal Permits with the proposed Cultural Resource Management actions, monitoring known eligible and need data sites and conducting Class III and/or modified Class III surveys on selected areas of BLM lands within in a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

The Little Snake Field Office will initiate the monitoring of known eligible and need data sites the first field season following the issuing of the permit if possible. This survey will be based upon an accepted, BLM and SHPO, research design that will establish criteria for evaluation of the sites for livestock impacts and any needed mitigation and future monitoring needs.

ATTACHMENTS:

Attachment 1, 1a, 1b – Allotment Map
Attachment 2 – Standard and Common Terms and Conditions

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

Finding of No Significant Impact

The environmental assessment, analyzing the environmental effects of the Proposed Action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the Proposed Action.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

ATTACHMENT #2
CO-100-2007-005EA
TERMS AND CONDITIONS

Standard Terms and Conditions

1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.

2) They are subject to cancellation, in whole or in part, at any time because of:
   a. Noncompliance by the permittee/lessee with rules and regulations;
   b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based;
   c. A transfer of grazing preference by the permittee/lessee to another party;
   d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described;
   e. Repeated willful unauthorized grazing use;
   f. Loss of qualifications to hold a permit or lease.

3) They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits and leases when completed.

4) Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.

5) The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.

6) The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.

7) Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.

8) Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.

9) Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

10) Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of $25 or 10 percent of the amount owed but not more than $250) will be assessed.

11) No member of, or Delegate to, Congress or Resident Commissioner, after his/her election of appointment, or either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

Common Terms and Conditions

A) Grazing use will not be authorized in excess of the amount of specified grazing use (AUM number) for each allotment. Numbers of livestock annually authorized in the allotment(s) may be more or less than the number listed on the permit/lease within the grazing use periods as long as the amount of specified grazing use is not exceeded.

B) Unless there is a specific term and condition addressing utilization, the intensity of grazing use will insure that no more than 50% of the key grass species and 40% of the key browse species current years growth, by weight, is utilized at the end of the grazing season for winter allotments and the end of the growing season for allotments used during the growing season. Application of this term needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.

C) Failure to maintain range improvements to BLM standards in accordance with signed cooperative agreements and/or range improvement permits may result in the suspension of the annual grazing authorization, cancellation of the cooperative agreement or range improvement permit, and/or the eventual cancellation of this permit/lease.

D) Storing or feeding supplemental forage on public lands other than salt or minerals must have prior approval. Forage to be fed or stored on public lands must be certified noxious weed-free. Salt and/or other mineral supplements shall be placed at least one-quarter mile from water sources or in such a manner as to promote even livestock distribution in the allotment or pasture.

E) Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

The operator is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any allotment activities or grazing activities, the operator is to immediately stop activities in the immediate vicinity and immediately contact the authorized officer. Within five working days the authorized officer will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;
-the mitigation measures the operator will likely have to undertake before the identified area can be used for grazing activities again.

If paleontological materials (fossils) are uncovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials and contact the authorized officer. The operator and the authorized officer will consult and determine the best options for avoiding or mitigating paleontological site damage.

F) No hazardous materials/hazardous or solid waste/trash shall be disposed of on public lands. If a release does occur, it shall immediately be reported to this office at (970) 826-5000.

G) The permittee/lessee shall provide reasonable administrative access across private and leased lands to the BLM and its agents for the orderly management and protection of public lands.

H) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.

The terms and conditions of this lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.